

WHAT IS CLAIMED IS:

1. A method for matching a track set from a digital audio recording to metadata relating to the recording, the method comprising:
  - obtaining track duration data for the track set;
  - rounding the track duration data for the track set;
  - searching for matching records in a first database based on the rounded track duration data, each resulting matching record having an identifier;
  - retrieving track duration data from a second database based on the identifiers associated with the matching records;
  - comparing, if more than one matching record is found, the track duration data retrieved from the second database to the track duration data obtained for the track set to find a best matching record of in the second database;
  - outputting metadata contained in the best matching record of the second database.
2. The method according to claim 1, further comprising comparing, for each matching record, the track duration data retrieved from the second database to the track duration data obtained for the track set to determine if each matching record meets a match quality threshold.
3. The method according to claim 1, wherein the track duration data for the track set is received by a server from a client device via a network and the metadata is sent from the server to the client device via the network.
4. The method according to claim 1, wherein records of the first database are generated by rounding a sequence of track durations computed from table of contents data for each recording of a collection of digital audio recordings.

5. The method according to claim 4, wherein the computed sequence of track duration data for each recording is obtained from the second database.
6. The method according to claim 4, wherein the computed sequence of track durations for each recording is truncated to a predetermined number of tracks.
7. The method according to claim 4, wherein the rounding of the sequence of track durations comprises:
  - rounding each value in the sequence of track durations in a selected direction to a nearest integer multiple of a rounding factor when the value is not within a predetermined range of an integer multiple of the rounding factor; and
  - rounding each value in the sequence of track durations in both the selected direction and an opposite direction when the value is within the predetermined range of an integer multiple of the rounding factor.
8. The method according to claim 7, further comprising generating multiple records for the first database from the sequence of track durations when at least one value in the sequence is rounded in both the selected direction and the opposite direction.
9. The method according to claim 7, wherein the multiple records correspond to all possible permutations of the sequence resulting from values that have been rounded in both the selected direction and the opposite direction.
10. The method according to claim 1, wherein the best matching record of the second database is determined by computing a sum of squared differences between a sequence of values in the track duration data retrieved from the second database and a corresponding sequence of values in the track duration data obtained for the track set.

11. A method of generating records for a matching database for a collection of digital audio recordings, the method comprising:
  - obtaining a sequence of track durations for each recording of the collection of recordings;
  - rounding each value in the sequence of track durations in a selected direction to a nearest integer multiple of a rounding factor when the value is not within a predetermined range of an integer multiple of the rounding factor;
  - rounding each value in the sequence of track durations in both the selected direction and an opposite direction when the value is within the predetermined range of an integer multiple of the rounding factor;
  - generating multiple records from the sequence of track durations when at least one value in the sequence is rounded in both the selected direction and the opposite direction,
  - wherein the multiple records correspond to all possible permutations of the sequence resulting from values that have been rounded in both the selected direction and the opposite direction.
12. The method according to claim 11, wherein the sequence of track durations for each recording of the collection of recordings is obtained from a second database containing a record corresponding to each recording, each record including metadata relating to the recording.
13. A system for providing information relating to a digital audio recording to a client device, the system comprising:
  - a server configured to receive track duration data for the digital audio recording via a network;
  - a first database configured to allow matching records to be found based on the track duration data after the track duration data has been rounded, each matching record having an identifier;

a second database configured to allow track duration data to be retrieved based on the identifiers associated with the matching records found in the first database;

a comparison module for comparing the track duration data retrieved from the second database to the track durations data received for the recording to find a best matching record of the second database;

an output module for sending information relating to the recording contained in the best matching record of the second database to the client device via the network.

14. Computer code for matching a track set from a digital audio recording to metadata relating to the recording, the computer code comprising:

code for obtaining track duration data for the track set;

code for rounding the track duration data for the track set;

code for searching for matching records in a first database based on the rounded track duration data, each resulting matching record having an identifier;

code for retrieving track duration data from a second database based on the identifiers associated with the matching records;

code for comparing, if more than one matching record is found, the track duration data retrieved from the second database to the track duration data obtained for the track set to find a best matching record of in the second database;

code for outputting metadata contained in the best matching record of the second database.

15. The computer code according to claim 14, further comprising code for comparing, for each matching record, the track duration data retrieved from the second database to the track duration data obtained for the track set to determine if each matching record meets a match quality threshold

16. The computer code according to claim 14, wherein the track duration data for the track set is received by a server from a client device via a network and the metadata is sent from the server to the client device via the network.

17. The computer code according to claim 14, wherein records of the first database are generated by rounding a sequence of track durations computed from table of contents data for each recording of a collection of digital audio recordings.

18. The computer code according to claim 17, wherein the computed sequence of track duration data for each recording is obtained from the second database.

19. The computer code according to claim 17, wherein the computed sequence of track durations for each recording is truncated to a predetermined number of tracks.

20. The computer code according to claim 17, wherein computer code for the rounding of the sequence of track durations comprises:

code for rounding each value in the sequence of track durations in a selected direction to a nearest integer multiple of a rounding factor when the value is not within a predetermined range of an integer multiple of the rounding factor; and

code for rounding each value in the sequence of track durations in both the selected direction and an opposite direction when the value is within the predetermined range of an integer multiple of the rounding factor.

21. The computer code according to claim 20, further comprising code for generating multiple records for the first database from the sequence of track durations when at least one value in the sequence is rounded in both the selected direction and the opposite direction.

22. The computer code according to claim 20, wherein the multiple records correspond to all possible permutations of the sequence resulting from values that have been rounded in both the selected direction and the opposite direction.
23. The computer code according to claim 14, wherein the best matching record of the second database is determined by computing a sum of squared differences between a sequence of values in the track duration data retrieved from the second database and a corresponding sequence of values in the track duration data obtained for the track set.
24. Computer code for generating records for a matching database for a collection of digital audio recordings, the computer code comprising:
- code for obtaining a sequence of track durations for each recording of the collection of recordings;
  - code for rounding each value in the sequence of track durations in a selected direction to a nearest integer multiple of a rounding factor when the value is not within a predetermined range of an integer multiple of the rounding factor;
  - code for rounding each value in the sequence of track durations in both the selected direction and an opposite direction when the value is within the predetermined range of an integer multiple of the rounding factor;
  - code for generating multiple records from the sequence of track durations when at least one value in the sequence is rounded in both the selected direction and the opposite direction,
  - wherein the multiple records correspond to all possible permutations of the sequence resulting from values that have been rounded in both the selected direction and the opposite direction.
25. The method according to claim 24, wherein the sequence of track durations for each recording of the collection of recordings is obtained from a second database

containing a record corresponding to each recording, each record including metadata relating to the recording.